

MARKED UP VERSION OF CLAIMS WITH MARKING

TO SHOW CHANGES MADE

1. (Canceled)

2. (Currently Amended) A sterile formable bone composition as claimed in claim [[+]]

21 wherein said bone particles are allograft cortical bone ranging from 100 microns to 850 microns in size at a concentration ranging from 20% to 35% by weight of the composition.

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Currently Amended) A sterile formable bone composition as claimed in claim [[+]]

21 wherein said bone particles are taken from a group consisting of allograft bone, cortical allograft bone, cortical cancellous bone, cancellous bone, autologous bone and xenograft bone

8. (Currently Amended) A sterile formable bone composition as claimed in claim [[+]]

21 wherein said composition includes bone chips taken from a group consisting of partially demineralized chips and non demineralized chips having a particle size ranging from 0.1mm to 1.0cm which are added to said viscous carrier at a concentration of about 5% to about 25%.

9. (Canceled)

10. (Currently Amended) A sterile formable bone composition as claimed in claim [[+]]

21 including a cellular material taken from a group consisting of living cells and cell elements such as chondrocytes, red blood cells, white blood cells, platelets, blood plasma, bone marrow cells,

mesenchymal stem cells, pluripotential cells, osteoblasts, osteoclasts, and fibroblasts, epithelial cells, and endothelial cells. These cells or cell elements or combinations of the same are present at a concentration of 10^5 to 10^8 per cc of the carrier

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Original) A sterile formable bone composition for application to a bone defect site

to promote new bone growth at the site comprising a demineralized osteoinductive and osteoconductive bone particles in an aqueous carrier solution, the bone particles being added to a viscous carrier at a concentration ranging from 5-50%(w/w), the carrier comprising a hydrogel taken from a group consisting of chitosan and sodium alginate in a phosphate buffered aqueous solution, said hydrogel ranging from about 5.0% to about 20.0% by weight of the aqueous carrier solution and said hydrogel component having a molecular weight ranging from ten thousand to three hundred thousand Daltons with a stable viscosity at a temperature ranging from about 22° C to about 37°C and said composition having a pH ranging from about 6.8 to about 7.4 and a growth factor additive

added to said composition, said growth factor comprising one or more of a group consisting of transforming growth factor (TGF-beta), insulin growth factor (IGF-1); platelet derived growth factor (PDGF), vascular endothelial growth factor (VEGF), fibroblast growth factor (FGF) (numbers 1-23), osteopontin, growth hormones such as somatotropin cellular attractants and attachment agents.

22. (Currently Amended) A sterile formable bone composition as claimed in claim 21 including a cellular material additive taken from a group consisting of living cells and cell elements such as chondrocytes, red blood cells, white blood cells, platelets, blood plasma, bone marrow cells, mesenchymal stem cells, pluripotential cells, osteoblasts, osteoclasts, and fibroblasts, epithelial cells, and endothelial cells. These cells or cell elements or combinations of the same are present at a concentration of 10^5 to 10^8 per cc of the carrier

23. (Original) A sterile malleable bone composition for application to a bone defect site to promote new bone growth at the site comprising demineralized osteoinductive and osteoconductive bone particles in an aqueous carrier solution, the bone particles being added to a viscous carrier at a concentration ranging from 5-50%(w/w), the carrier comprising a hydrogel taken from a group consisting of chitosan and sodium alginate in a phosphate buffered aqueous solution, said hydrogel ranging from about 5.0% to about 20.0% by weight of the aqueous carrier solution and cellular material taken from a group consisting of living cells, cell elements such as red blood cells, white blood cells, platelets, blood plasma, pluripotential cells, osteoblasts, osteoclasts, and fibroblasts, epithelial cells, and endothelial cells present at a concentration of 10^5 to 10^8 per cc of the carrier, said hydrogel component having a molecular weight ranging from ten thousand to three hundred thousand Daltons with a stable viscosity and said composition having a pH ranging from about 6.8 to about 7.4

24. (Original) A sterile formable bone composition as claimed in claim 23 including growth factor additive added to said composition, said growth factor comprising one or more of a group consisting of transforming growth factor (TGF-beta), insulin growth factor (IGF-1); platelet derived growth factor (PDGF), vascular endothelial growth factor (VEGF), fibroblast growth factor (FGF) (numbers 1-23), osteopontin, growth hormones such as somatotropin cellular attractants and attachment agents.

25. (Original) A sterile formable bone composition as claimed in claim 23 including growth factor additive added to said composition comprising one or more of a group consisting of fibroblast growth factor (FGF) (numbers 1-23) in the amount of 2-4 milligrams in 10cc of carrier solution.